



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,199	07/18/2003	Guy Eden	SLA1375	4040

7590 10/31/2007
Gerald W. Maliszewski
P.O. Box 270829
San Diego, CA 92198-2829

EXAMINER

CRUZ, IRIANA

ART UNIT	PAPER NUMBER
----------	--------------

2625

MAIL DATE	DELIVERY MODE
-----------	---------------

10/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/622,199

Applicant(s)

EDEN ET AL.

Examiner

Iriana Cruz

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-11 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,8-11 and 19-20 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 15-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claim 10 is withdrawn in view of the newly discovered reference(s) to Gauthier'205 (US Publication Number 2002/0122205 A1).

Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1 and 10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 10 refer to a "Printer device" and a "method" at the same time.

Claims 1 and 10 should read "the method for controlling a printer device responsive to a document's print content..."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1, 4, 10-11 and 14** are rejected under 35 U.S.C. 102(e) as being unpatentable by Gauthier (US Publication Number 2002/0122205 A1).

Regarding **Claim 1**, Gauthier'205 discloses a printer device control method responsive to a document's print content (i.e., the variable data contains the content of a print document. A method control that can identify the variable data and depending on it executes a command could be a control method responsive to the variable data ((print content document)). See Paragraphs 11-15), the method comprising: establishing a library of vocabulary terms (i.e., when a graphic state ((graphic state can be referred as text or graphic/symbol)) is identified in the variable data this graphic state is reserved in an internal database/library for later use. See Paragraphs 10, 12 and 14-15); establishing a library of executable programs (i.e., each graphic state ((text or graphic/symbol)) has a bit map in correspondence which is saved in a library ((internal data base)). The page description code program is called when a graphic state is identified in the variable data, to execute the corresponding code that generates the bit map information corresponding to the graphic state ((text or graphic/symbol)) identified. The page description code programs for each graphic state ((text or graphic/symbol)) found are reserved in a library ((internal data base)). See Paragraphs 11-15); mapping between the library of vocabulary terms and the library of executable programs (i.e., every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable page description code program found in the executable program library ((internal data base)). See Paragraphs 11-15); accepting a document for printer processing (i.e., a document ((image containing text and/or graphics data)) is ready to be sent to print and the variable data is created to be printed. See Paragraphs 15 and 22-23); classifying print content in the document by

matching print content in the document to vocabulary terms in the library (i.e., every time a graphic state ((text or graphic/symbol)) is identified ((classified)) on the variable data it is found on the library previously created. See Paragraphs 11-15); and, executing a program in response to the print content classification by selecting an executable file in response to mapping between matched vocabulary terms and executable programs (i.e., every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable page description code program found in the executable program library ((internal data base)). See Paragraphs 11-15).

Regarding **Claim 4**, Gauthier'205 discloses a print device control method that establishes a library of vocabulary terms includes establishing a library of vocabulary terms selected from the group including key words, symbols, word patterns, and data patterns (i.e., when a graphic state ((graphic state can be referred as text or graphic/symbol)) is identified in the variable data ((print document content)) this graphic state is reserved in an internal database/library for later use. The graphic state could be text graphic/images or codes. Key words, data patterns and word patterns can be interpreted as text, and symbols can be images. See Paragraphs 10, 12 and 14-15).

Regarding **Claim 10**, Gauthier'205 discloses a printer device control method responsive to a document's print content (i.e., the variable data contains the content of a print document. A method control that can identify the variable data and depending on it executes a command could be a control method responsive to the variable data ((print content document)). See Paragraphs 11-15), the method comprising: establishing a

library of vocabulary terms (i.e., when a graphic state ((graphic state can be referred as text or graphic/symbol)) is identified in the variable data this graphic state is reserved in an internal database/library for later use. See Paragraphs 10, 12 and 14-15), establishing a library of executable programs (i.e., each graphic state ((text or graphic/symbol)) has a bit map in correspondence which is saved in a library ((internal data base)). The page description code program is called when a graphic state is identified in the variable data, to execute the corresponding code that generates the bit map information corresponding to the graphic state ((text or graphic/symbol)) identified. The page description code programs for each graphic state ((text or graphic/symbol)) found are reserved in a library ((internal data base)). See Paragraphs 11-15); mapping between the library of vocabulary terms and the library of executable programs (i.e., every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable page description code program found in the executable program library ((internal data base)). See Paragraphs 11-15); accepting a document for printer processing (i.e., a document ((image containing text and/or graphics data)) is ready to be sent to print and the variable data is created to be printed. See Paragraphs 15 and 22-23); classifying print content in the document (i.e., every time a graphic state ((text or graphic/symbol)) is identified ((classified)) on the variable data it is found on the library previously created. See Paragraphs 11-15); and, selecting an executable file in response to mapping between matched vocabulary terms and executable programs (i.e., every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable

page description code program found in the executable program library ((internal data base)). See Paragraphs 11-15).

Regarding **Claim 11**, Gauthier'205 discloses a printer device control system responsive to the document's print content (i.e., the variable data contains the content of a print document. A method control that can identify the variable data and depending on it executes a command could be a control method responsive to the variable data ((print content document)). See Paragraphs 11-15), the system comprising: an interpreter having an input to accept a print driver output file and an output to supply an interpreted document for printer processing (i.e., the document print content ((variable data)) is sent to the interpreter and after processing send to printing. In order to receive and send there has to be an input and output. See Paragraphs 23-24); a library of vocabulary terms with an interface connected to a classifier interface (i.e., when a graphic state ((graphic state can be referred as text or graphic/symbol)) is identified in the variable data this graphic state is reserved in an internal database/library for later use. In order to classify/identify the content of the document/variable-data a connection between the classifier and the data. See Paragraphs 10, 12 and 14-15); a library of executable programs with an interface connected to the classifier interface (i.e., every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable page description code program found in the executable program library ((internal data base)). In order to classify/identify the content of the document/variable-data a connection between the classifier and the data. See Paragraphs 11-15);

a mapping library cross-referencing vocabulary terms with executable files, having an interface connected to the classifier interface (i.e., every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable page description code program found in the executable program library ((internal data base)). See Paragraphs 11-15); and, a classifier having an interface to accept the interpreted document (i.e., the document print content ((variable data)) is sent to the interpreter and after processing send to printing. In order to receive and send there has to be an input and output. See Paragraphs 23-24), the classifier classifying print content in the interpreted document, accessing the library of vocabulary terms to match print content in the interpreted document to vocabulary terms in the library, and accessing the mapping library to select an executable file from the library of executable programs, in response to matching print content to a vocabulary term from the library of vocabulary terms selecting a program for execution in response to the print content classification (i.e., every time a graphic state ((text or graphic/symbol)) is identified ((classified)) on the variable data it is found on the library previously created. Every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable page description code program found in the executable program library ((internal data base)). See Paragraphs 11-15).

Regarding **Claim 14**, Gauthier'205 discloses a wherein the library of vocabulary terms includes terms selected from the group including key words, symbols, word patterns, and data patterns (i.e., when a graphic state ((graphic state can be referred as text or graphic/symbol)) is identified in the variable data ((print document content)) this

graphic state is reserved in an internal database/library for later use. The graphic state could be text graphic/images or codes. Key words, data patterns and word patterns can be interpreted as text, and symbols can be images. See Paragraphs 10, 12 and 14-15).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 8-9 and 19-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier (US Publication Number 2002/0122205 A1) in view of Hull et al. (US Patent Number 5,978,477).

Regarding **Claim 8**, Gauthier'205 teaches the a printer device control method responsive to a document's print content (i.e., the variable data contains the content of a print document. A method control that can identify the variable data and depending on it executes a command could be a control method responsive to the variable data ((print content document)). See Paragraphs 11-15), the method comprising: establishing a library of vocabulary terms (i.e., when a graphic state ((graphic state can be referred as text or graphic/symbol)) is identified in the variable data this graphic state is reserved in an internal database/library for later use. See Paragraphs 10, 12 and 14-15);

establishing a library of executable programs (i.e., each graphic state ((text or graphic/symbol)) has a bit map in correspondence which is saved in a library ((internal data base)). The page description code program is called when a graphic state is identified in the variable data, to execute the corresponding code that generates the bit map information corresponding to the graphic state ((text or graphic/symbol)) identified. The page description code programs for each graphic state ((text or graphic/symbol)) found are reserved in a library ((internal data base)). See Paragraphs 11-15); mapping between the library of vocabulary terms and the library of executable programs (i.e., every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable page description code program found in the executable program library ((internal data base)). See Paragraphs 11-15); accepting a document for printer processing (i.e., a document ((image containing text and/or graphics data)) is ready to be sent to print and the variable data is created to be printed. See Paragraphs 15 and 22-23); classifying print content in the document by matching print content in the document to vocabulary terms in the library (i.e., every time a graphic state ((text or graphic/symbol)) is identified ((classified)) on the variable data it is found on the library previously created. See Paragraphs 11-15); and, executing a program in response to the print content classification by selecting an executable file in response to mapping between matched vocabulary terms and executable programs (i.e., every time a graphic state ((text or graphic/symbol)) is identified on the variable data it is found on the library and mapped to its executable page description code program found in the executable program library ((internal data base)). See Paragraphs

11-15). Gauthier'205 does not teaches accepting a bitmap document; performing optical character recognition (OCR) of the bitmap document; generating text strings; and, wherein accepting a document for printer processing includes accepting the generated text strings.

However Hull'477 teaches accepting a bitmap document; performing optical character recognition (OCR) of the bitmap document; generating text strings; and, wherein accepting a document for printer processing includes accepting the generated text strings (i.e. when converting from an specific format of page description code to text for printing optical character recognition is used. See Column 7, Line 54-63).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the print responsive to document control method as taught by Gauthier'205 with converting from a format to text for printing using image character recognition as taught by Hull in order to increase the speed of document printing and to have an improved method of printing which is compatible with existing page description languages and printing system.

Regarding **Claim 9**, Hull'477 teaches the control method processing the document using a process selected from the group including scanning, faxing, archiving, transmitting, and paper copy reproduction (i.e., This process could be implemented in a scanner, copy machine or faxing machine. See Column 2, Line 57-67 and Column 6, Line 58-64).

Regarding **Claim 19**, Hull'477 teaches accepting a bitmap document; performing optical character recognition (OCR) of the bitmap document; generating text strings; and, wherein accepting a document for printer processing includes accepting the generated text strings (i.e. when converting from an specific format of page description code to text for printing optical character recognition is used. See Column 7, Line 54-63).

Regarding **Claim 20**, Hull'477 teaches the control method processing the document using a process selected from the group including scanning, faxing, archiving, transmitting, and paper copy reproduction (i.e., This process could be implemented in a scanner, copy machine or faxing machine. See Column 2, Line 57-67 and Column 6, Line 58-64).

Allowable Subject Matter

7. **Claims 5-7 and 15-18** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the references, either singularly or in combination teach a printer control method responsive to a document's print document that establishes a library of vocabulary terms establishing a library of executable programs mapping between the library of vocabulary terms and the library of executable programs accepting a document for printer processing; classifying print content in the document by matching

print content in the document to vocabulary terms in the library; and, executing a program in response to the print content classification by selecting an executable file in response to mapping between matched vocabulary terms and executable programs wherein accepting a document for printer processing includes: generating a printer driver output file; interpreting the printer driver output file into a rasterized image; and, wherein matching print content in the document to vocabulary terms in the library includes: parsing the rasterized image into tokens; identifying tokens that represent data to be printed; buffering the data to be printed; and, examining the buffered data for vocabulary terms where the method of claim 5 wherein generating a printer driver output file includes generating a page description language file selected from the group including printer control language (PCL) and PostScript and where establishing a library of executable programs includes establishing a library of executable programs including sending reports of the document to a recipient, blocking the document print process, logging the document print process, updating a database, archiving the document, executing a program to initiate additional document processing, and executing a plurality of programs to initiate additional document processing.

Conclusion

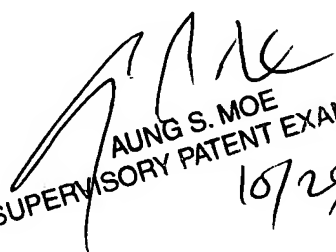
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iriana Cruz whose telephone number is (571) 270-3246. The examiner can normally be reached on Monday-friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Iriana Cruz
Examiner
Art Unit 2625

October 26, 2007


AUNG S. MOE
SUPERVISORY PATENT EXAMINER
10/29/07